

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method of controlling the driving of a function liquid droplet ejection head having disposed therein a plurality of nozzle arrays with a different function liquid droplet ejection amount per unit nozzle,

wherein, in one print cycle, driving of the plurality of nozzle arrays is controlled by using a single drive signal having a plurality of ejection pulses corresponding to the plurality of nozzle arrays;

wherein the plurality of nozzle arrays include a first nozzle array which ejects a first function liquid droplet ejection amount and a second nozzle array which ejects a second function liquid droplet ejection amount which is smaller than the first function liquid droplet ejection amount, and wherein a number of nozzles in the second nozzle array is two times the number of nozzles in the first nozzle array.

2. (Original) The method according to claim 1, wherein the plurality of ejection pulses have waveforms which are different from each other in accordance with specifications of corresponding nozzle arrays.

3. (Previously Presented) The method according to claim 1, wherein driving of the plurality of nozzle arrays is controlled by using an identical ejection pulse in case of

performing flushing which is function recovery processing by waste discharging of liquid droplets from all nozzles.

4. (Original) The method according to claim 1, wherein the drive signal has a micro oscillation pulse which subjects a function liquid to form a meniscus of each nozzle to micro oscillation, and wherein only one waveform of the micro oscillation pulse is inputted in said one print cycle.

5. (Original) The method according to claim 4, wherein the micro oscillation pulse is inputted before input of the plurality of ejection pulses in said one print cycle.

6. (Original) The method according to claim 1, wherein the drive signal has a damping pulse for damping residual oscillation of a pressure generating element which generates pressure fluctuations in a cavity communicated with each nozzle, and wherein, in said one print cycle, the damping pulse is inputted after input of the plurality of ejection pulses and has a waveform corresponding to a waveform of the last inputted ejection pulse.

7-26. (Cancelled)